

Air Force breaks ground for \$15.5M facility

by J. Rich Garcia, Directed Energy Directorate

KIRTLAND AIR FORCE BASE, N.M. —Senators Pete Domenici (R-N.M.) and Jeff Bingaman (D-N.M.) were among the dignitaries who officiated Feb. 20 at a groundbreaking ceremony for a \$15.5 million laboratory.

The 52,000-square-foot facility will support the Air Force Research Laboratory's Directed Energy Directorate in its advanced optical research, laser propagation and space object imaging.

This new facility, called the Telescope and Atmosphere Compensation Laboratory, will feature an aluminizing recoating capability for large mirrors. One such mirror is the 3.5-meter primary mirror on the directorate's largest telescope at Kirtland's Starfire Optical Range. This recoating capability could also be used on the large mirrors at local astronomical observatories. There will be enough laboratory space – and associated optics, electronics and computers – to design, construct, test and integrate experimental hardware for optical research. Also included will be office space, conference rooms, and group work areas for 84 scientists, engineers, and technicians who are currently housed in portable buildings and trailers in the area.

The directorate, at its Starfire Optical Range, uses several telescopes for its advanced optical research. These include a 1.0-meter beam director, a 1.5-meter telescope and a 3.5-meter telescope. All are capable of tracking low-earth-orbit satellites, and all are equipped with large-scale, high-performance adaptive optical systems. The range also has numerous smaller telescopes, beam directors, laser systems, and a variety of optics, electronics and mechanical laboratories. Directorate researchers conduct field experiments in various technology areas, such as real-time atmospheric compensation, atmospheric turbulence physics, and target acquisition, pointing, and tracking.

K. L. House, Inc. of Albuquerque, N.M., was awarded this contract by the Albuquerque District of the U.S. Army Corps of Engineers. The corps is supervising the contractor's design and construction activities. The building is scheduled for completion in April 2004. @